

Impact of Entrepreneurship Education on Entrepreneurial Intention in Self-Efficacy Mediation

Mediany Kriseka Putri, S.K.G., M.A.B

Lecture and Researcher
Faculty of Economics and Business
Telkom University
Bandung, Indonesia
medianykep@telkomuniversity.ac.id

Audi Elvira Widiyanti

ICT Business Study Program
Faculty of Economics and Business
Telkom University
Bandung, Indonesia
elvirawidiyanti@student.telkomuniversity.ac.id

Abstract

The aims of this study are: (1) to determine the influence of Entrepreneurship Education on Entrepreneurial Intentions; (2) knowing the influence of Entrepreneurial Education on students' Entrepreneurial Self-efficacy; (3) knowing the influence of Entrepreneurial Self-efficacy on students' Entrepreneurial Intentions; (4) determine the influence of Entrepreneurship Education on Entrepreneurial Intentions mediated by Entrepreneurial Self-efficacy. The research method used in this research is descriptive analytical method with a quantitative approach. Questionnaires were distributed to 356 public high school students in Probolinggo City, through an online survey. The analytic technique used in this study are Kolmogorov-Smirnov Test, Multicollinearity Test, Heteroscedasticity Test, Simple Linear Regression, Multiple Linear Regression and Sobel Test. The data shows the result of this study are Entrepreneurship Education has significant positive impact on Entrepreneurial Intention ; Entrepreneurship Education has significant positive impact on Entrepreneurial Self-efficacy ; Entrepreneurial Self-efficacy has significant positive impact on Entrepreneurial Intention ; Entrepreneurial Self-efficacy mediated influence between Entrepreneurship Education on Entrepreneurial Intention. The results of this study are expected to be an evaluation material for teachers in the field of entrepreneurship education at Probolinggo city public High School in order to gain the entrepreneurial intention of the students.

Keywords

Entrepreneur, Entrepreneurship Education, Entrepreneurial Intention, Self-Efficacy

1. Introduction

In Indonesia, Micro, Small and Medium Enterprises play an important role in the Indonesian economy. It is proven by the contribution of Gross Domestic Product (GDP) of 61.97 percent of the total national GDP or equivalent to Rp. 8,500 trillion in 2020, and absorb labor in the amount of 97 percent of the absorption of the business world in 2020, so it can be said that small business has an important role in the absorption of labor in Indonesia (BPKM 2021). In 2016 there were 61.7 million small businesses and continued to increase until in 2018 small business in Indonesia reached 64.2 million and are predicted to continue to increase (data tempo 2021). However, in early 2020, the COVID-19 virus emerged which had a major impact on small business and threatened to go bankrupt. The general chairman of the Indonesian small business association, Ikhsan Ingratubun said that there were 30 million small business that had gone bankrupt out of a total of 63 million small business due to decreased turnover so they could not hire their employees. With the emergence of these problems, the government provides many assistance programs for small business so that they can continue to grow during the pandemic and continue to contribute to National GDP. These government programs are also supported by many parties, including the private sector and also educational institutions

in order to provide maximum benefits for small business. One of the supports comes from educational institutions to make the Entrepreneurship program a success, especially for public Senior High School students.

All public senior high schools in Probolinggo have implemented an entrepreneurship education system that has been started since 2013 following the 2013 Curriculum. The alumni recently graduated from higher education and is supported by the government, which is intensively providing assistance to small business through the AMEN (ASEAN Mentors for Entrepreneurship Network) program in 2017 and the policy of reducing small business tax by 0.5% in 2018. It is also supported by data on small business in the city of Probolinggo taken from the Office of Cooperatives and Micro Enterprises, Industry and Trade that the number of small business in Probolinggo city increased to 19,200 in 2020, which is still far less than small business in Malang which has 70,000 small business. But the increase is still not significant between the number of small business and the total population in Probolinggo city. Where there are 239.4 thousand inhabitants, while there are only 19,200 persons who own small business, which means that only 8 percent of the population of Probolinggo city have the opportunity to create jobs or become entrepreneurs (probolinggokota 2021). However, entrepreneur need to be impaled in practice so we can take action, the example entrepreneurial practice can be found at academic community, such as school and university. This is one of the challenges faced by academic institutions to create entrepreneurs, because 80 percent of students have challenges in the material field, thus creating a sense of insecurity that they can get success from what they do on their own accord, even though the government has launched the SIPlah program to help students recognize the importance of entrepreneurship activities.

Being an entrepreneur is also influenced by factors both internal and external. One of the internal factors that can encourage entrepreneurial intentions is the psychological factor. Support from the surrounding environment can shape one's thinking and self-confidence to become an entrepreneur. This kind of attitude is needed by high school students so that their entrepreneurial intentions can be formed properly. Confidence in what they do will succeed, this can also be called self-efficacy. For this reason, the role of self-efficacy is needed to measure the correlation between Entrepreneurship Education and Entrepreneurial Intention. Moreover, there are no results about correlation between Entrepreneurship Education and Entrepreneurial Intention in Probolinggo city.

1.1 Objectives

This paper aims to focus on how Entrepreneurship Education affects Entrepreneurial Intention by using Entrepreneurial Self-efficacy mediation, with the aim of contributing to education in Indonesia, especially Probolinggo city. This research makes it possible to see in terms of what makes students have the intention to become entrepreneurs. In addition, it is also used to test whether self-efficacy also plays a role in growing Entrepreneurial Intention. For this reason, this research will be tested on public senior high school students in Probolinggo city.

2. Literature Review

Entrepreneurship is defined as the process of individual to pursue opportunity without depend on sources they can control with the purpose of exploiting future goods and service. Entrepreneurship is also an art of turning ideas into money (Baringer and Ireland 2021). Entrepreneurship Education can be defined as an effort to convey knowledge carried out by an institution with the aims of creating knowledge, values, and entrepreneurial attitude to students which serves as a provision to become independent, creative, and innovative human beings (Firmansyah and Roosmawarni 2021). Entrepreneurial intention can be defined as an assumption to capture the motivational factors that influence behaviors, including how hard we are willing to try and how much effort we put into that situation (Ajzen 2020). Based on Indrawan et al. (2020), entrepreneurship courses in universities can increase the entrepreneurial intention of students. However, not every entrepreneurial intention translates into actual action, there is still a consensus that entrepreneurial intention is also a part of an important step of entrepreneurial behavior through self-efficacy in a person (Ajzen 2020). Self-efficacy is defined as a belief that a person has about their own competence (Bandura 2021). Based on Pedrini et al. (2017) on "E4impact MBA Program at Catholic Institute of Business and Technology in Ghana", showed that entrepreneurial education has a significant impact on student entrepreneurial intention. Education also has improves significantly someone's goals and decisions. Entrepreneurial Self-efficacy is also part of an important attribute to increasing motivation in terms of business and persistent planning (Bandura 2021). Puni et al. (2018), recently presented the result of research on entrepreneurship education, entrepreneurial intention, and entrepreneurial self-efficacy. The investigation has shown that there is significant positive impact between entrepreneurship education, entrepreneurial intention, and entrepreneurial self-efficacy.

In summary, the main goal of this paper is to know how significant the relationship is between entrepreneurship education, entrepreneurial intention, and entrepreneurial self-efficacy. This paper also has a goal to see the impact of every variable when entrepreneurial self-efficacy being the mediation variable between entrepreneurship education and entrepreneurial intention. Based on our explanation above, we propose the following hypotheses:

- H1: Entrepreneurship education has a significant positive impact on entrepreneurial intentions
- H2: Entrepreneurship education has a significant positive impact on entrepreneurial self-efficacy
- H3: Entrepreneurial self-efficacy has a significant positive impact on entrepreneurial intentions
- H4: Entrepreneurial self-efficacy mediates the significant impact between entrepreneurship education and entrepreneurial intention.

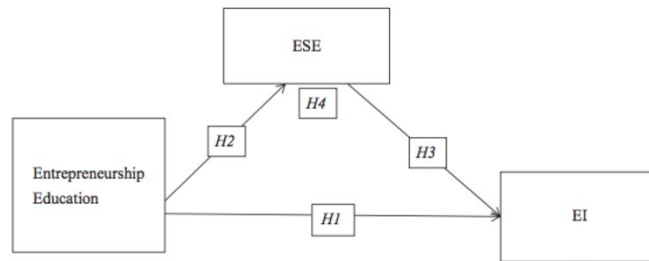


Figure 1. Research Framework

3. Methods

Data for this research were gathered by primary data collection method by distributing questioner. The questioners were distributed in several public high schools in Probolinggo, including SMAN 1 Probolinggo, SMAN 2 Probolinggo, SMAN 3 Probolinggo and SMAN 4 Probolinggo. Before completing the questionnaire, respondents were asked whether they had received entrepreneurship education or not, and then the respondents will receive instructions to fill out the questionnaire. There are 19 statements in the questionnaire as the measurement items as presented in Table 1. All items in the questionnaire are derived from the previous research about entrepreneurship education, entrepreneurial intention, and entrepreneurial self-efficacy and adapted to this study. These items were measured using Likert scale with four-point, started from “strongly disagree” to “strongly agree”.

Table 1. Measurement Items

Construct	Measurement Item	Reference
Entrepreneurial Intention (EI)	I am determined to create a firm in the future	(Puni et al. 2018)
	I will make every effort to start and run my own firm	(Puni et al. 2018)
	My professional goal is to become an entrepreneur	(Puni et al. 2018)
	I am ready to do anything to be an entrepreneur	(Puni et al. 2018)
	I have very seriously thought of starting a firm	(Puni et al. 2018)
Entrepreneurship Education (EE)	Through entrepreneurship education, I learn methods to generate basic business ideas	(Puni et al. 2018)
	Entrepreneurship education enables me to recognize alternative career options	(Puni et al. 2018)
	Entrepreneurship education enhances my ability to better perceive business opportunities in my environment	(Puni et al. 2018)
	Entrepreneurship education has empowered me to solve economic-social problems in my environments	(Puni et al. 2018)
	Entrepreneurship education enables me to identify the characteristic of successful entrepreneurs (e.g. risk-taking, innovativeness, etc.)	(Puni et al. 2018)
	Entrepreneurship education gives me a feeling of independence	(Puni et al. 2018)
	Entrepreneurship education increases my awareness of the different forms of business that I can set up (ex. partnership, sole proprietorship, etc.)	(Puni et al. 2018)

	Entrepreneurial training increases my awareness of the rights of entrepreneurs	(Puni et al. 2018)
	Entrepreneurship education has enhanced my understanding of the different sources I can obtain funding to start a new business	(Puni et al. 2018)
Entrepreneurial Self-efficacy (ESE)	I know how to develop an entrepreneurial project	(Puni et al. 2018)
	I know the necessary practical details to start a firm	(Puni et al. 2018)
	I can control the creation process of a new firm	(Puni et al. 2018)
	To start a firm and keep it working would be easy for me	(Puni et al. 2018)
	I am prepared to start a viable firm	(Puni et al. 2018)

Before collecting the whole data from the sample, the questionnaire has to be tested for validity and reliability using Pearson Product Moment and Alpha Cronbach. Using 35 correspondents for the validity and reliability test, with condition validity test must be bigger than Rtable with 35 correspondents with the result 0.334 and for the reliability, the test must be bigger than 0.7. The result of this test is using SPSS 25 and it shows that all the questionnaire is valid and reliable.

The total sample of this paper is 356 correspondents from senior high school students in Probolinggo. The analysis technique in this paper is using SPSS 25, and is performed with a classic assumption test (normality test, multicollinearity, heteroscedasticity), simple linear regression, multiple linear regression, and sobel test. The normality test uses Kolmogorov - Smirnov Test with the condition the significant value must be bigger than 0.05.

4. Data Collection

This paper is based on the data measured in a specific sample. The total sample from this paper is 356 students of public senior high school in Probolinggo city. The period time of this paper is 3 weeks, starting from 14th April until 8 Mei 2022. Before data is processed, we need to do the classic assumption test. Asymp. Sig. 2-tailed were used to see the probability value or p-value to ensure the observed distribution were not deviate significantly from the expected distribution at both ends of the two-tailed distribution. Table 2 is the result of the normality test using Kolmogorov - Smirnov, which shows that the data obtained are normal because the result of sig is 0.2 bigger than 0,005.

Table 2. Result of Kolmogorov – Smirnov Test

		Unstandardized Residual
N		356
Normal Parameters	Mean	.0000000
	Std. Deviation	1.58969602
Most Extreme Differences	Absolute	.039
	Positive	.036
	Negative	-.039
Test Statistic		.039
Asymp. Sig. (2-tailed)		.200

To see if the regression model has a correlation between the independent variables, we need to do a multicollinearity test. To determine the presence or absence of multicollinearity in the regression model, it can be seen from the tolerance value and the value of the variance inflation factor (VIF) and tolerance. Provided that if the tolerance value is > 0.01 or the VIF value is < 10, it is declared that there is no multicollinearity. Table 3 is the result of the multicollinearity test and it shows that the result is the tolerance value from entrepreneurship education and entrepreneurial self-efficacy is bigger than 0.01 and the VIF from entrepreneurship education and entrepreneurial self-efficacy is smaller than 10. In conclusion, there is no multicollinearity in this data.

Table 3. Result of Multicollinearity Test

Model	Unstandardized Coefficients		Standardized Coefficient Beta	t	Sig	Collinearity Statistic	
	B	Std. Error				Tolerance	VIF
(Constant)	1.787	.433		4.124	.000		
Entrepreneurship Education	.127	.017	.253	7.504	.000	.608	1.644
Entrepreneurial Self-efficacy	.637	.031	.689	20.428	.000	.608	1.644

Heteroscedasticity is used to test whether in the regression model there is an inequality of variance from the residuals of one observation to another observation. Table 3 shows the significance of entrepreneurship education is 0.966 and the significance of entrepreneurial self-efficacy is 0.194. Then it can be said that the data obtained does not occur heteroscedasticity because the significance is bigger than 0.05.

Table 4. Result of Heteroscedasticity Test

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
(Constant)	1.605	.272		5.902	.000
Entrepreneurship Education	.000	.011	.003	.043	.966
Entrepreneurial Self-efficacy	-.025	.020	-.088	-1.302	.194

5. Results and Discussion

Based on the data that has been obtained previously, the questionnaire obtained does not occur deviations and the data are normal. The linear regression model will be tested to see the correlation between variables. The linear regression models used in this paper are simple linear regression and multiple linear regression. Simple linear regression is used to see the correlation effect between Entrepreneurship Education and Entrepreneurial Intention. Multiple linear regression is used to see the correlation effect between Entrepreneurship Education and Entrepreneurial Self-efficacy on Entrepreneurial Intention.

There will be 3 regression analysis, starting with Table 5. until Table 7. indicate about correlation between Entrepreneurship Education and Entrepreneurial Intention. R square is the proportion of the variation of the dependent variable that can be predicted from the independent variable. In table 5. the result of R Square is 0.468, it shows that the independent variable can explain the dependent variable by 46.8% and the rest is explained from other variables. Unstandardized coefficients beta commonly used for regression models where the function is to predict the future picture with past data. Table 6 shows result of the Beta coefficient value is 0.684 and the result of the t count is 17.633 and its bigger than t-table result 1.966 with a sig. value of 0.000 smaller than 0.05. The data shows that Entrepreneurship Education has significant positive impact on Entrepreneurial Intention.

Table 5. Result of Model Summary Regression 1

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.684	.468	.466	2.352

Table 6. Result of ANOVA 1

	Model	Sum of Square	df	Mean Square	F	Sig.
1	Regression	1719.414	1	1719.414	310.912	.000
	Residual	1957.698	354	5.530		
	Total	3677.112	355			

Table 7. Result of Coefficients 1

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
(Constant)	4.924	.598		8.239	.000
Entrepreneurship Education	0.342	.019	.684	17.633	.000

The second regression is to know the result correlation between Entrepreneurship Education and Entrepreneurial Self-efficacy. Table 8. shows that the result of R Square is 0.392, its mean independent variable can explain the dependent variable by 39%. At Table 10. the result of coefficients beta is 0.626 and the t value is 15.095 with significant value 0.000. Entrepreneurship Education has significant positive impact on Entrepreneurial Self-efficacy, because the result of t value is bigger than 1.996 taken from t table and the significant value is smaller than 0.05.

Table 8. Result of Model Summary 2

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.626	.392	.390	2.717

Table 9. Result of ANOVA 2

	Model	Sum of Square	df	Mean Square	F	Sig.
1	Regression	1681.988	1	1681.988	227.865	.000
	Residual	2613.057	354	7.382		
	Total	4295.045	355			

Table 10. Result of Coefficients 2

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
(Constant)	4.924	.690		7.132	.000
Entrepreneurship Education	0.339	.022	.626	15.095	.000

The third regression from Table 11. until Table 13. is show the correlation between Entrepreneurial Self-efficacy and Entrepreneurial Self-efficacy. Table 11. shows the coefficient determination is 0.755. The result has meaning that independent variable can explain the dependent variable by 75.5%.

Table 11. Result of Model Summary 3

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.869	.756	.755	1.594

Table 12. show the result of F is 546.928, and its bigger than 2.63 by the F table and with significant value 0.000 smaller than 0.05. That means there are simultaneous influence of Entrepreneurial Education and Entrepreneurial Self-efficacy toward Entrepreneurial Intention. In Table 13. The coefficient beta value is 0.689, the t value is 20.428 and

significant value is 0.000. The number shows that Entrepreneurial self-efficacy has significant positive impact on Entrepreneurial Intention, because the significant value is smaller than 0.05 and the t value is bigger than t table 1.966.

Table 12. Result of ANOVA 3

Model	Sum of Square	df	Mean Square	F	Sig.	
1	Regression	2779.980	2	1389.990	546.928	.000
	Residual	897.132	353	2.542		
	Total	3677.112	355			

Table 13. Result of Coefficients 3

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
(Constant)	1.787	.433		4.124	.000
Entrepreneurship Education	.127	.017	.253	7.504	.000
Entrepreneurial Self-efficacy	.637	.031	.689	20.428	.000

While the mediation between independent variable and dependent variable can be seen in Figure 2. Using Sobel Test to calculate the significant between Entrepreneurial Intention and Entrepreneurship education with Entrepreneurial Self-efficacy. The Sobel Test value is 12.327 bigger than the t table with value 1.96. The significant value is 0.000 smaller than 0.05. Thus, Entrepreneurial Self-efficacy mediates the relationship between Entrepreneurship Education and Entrepreneurial Intention.

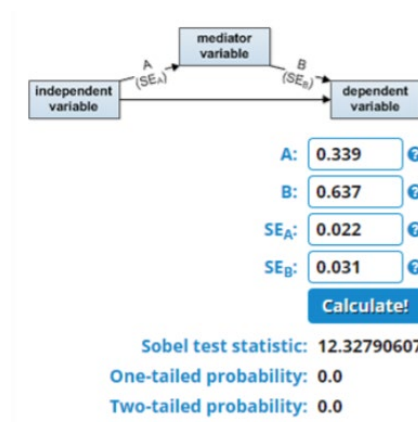


Figure 2. Result of Sobel Test

5.1 Validation

Based on the processed data above, all hypotheses are accepted. It can be said that Entrepreneurship Education, Entrepreneur Intention and Entrepreneurial Self-efficacy influence each other. As the results presented by Puni et al (2018), research is still needed to measure how much influence is generated between variables. To calculate the magnitude of the effect using the effective contribution and the relative contribution. In this study were using different analytical method from previous studies, therefore the results finding are different even though the variable still having the same positive impact towards each other. Puni et al (2018) only use multiple linear regression for the analytic method, while this study using more complex analytic method including simple linear regression, multiple linear regression and sobel test to see the impact from mediation variable between dependent variable and independent variabel. Thus, still need of emphasis to see more results through relative contribution and effective contribution.

6. Conclusion

Entrepreneurship education has been applied to senior high school students in the Probolinggo city, it is necessary to see how the influence they received from entrepreneurship education that they got to their entrepreneurial intentions. The results of the study state that Entrepreneurship Education has significant positive impact to Entrepreneurial Intention, Entrepreneurship Education also has significant positive impact to Entrepreneurial Self-efficacy, Entrepreneurial Intention has significant positive impact to Entrepreneurial Self-efficacy. Measured using the Entrepreneurial Self-efficacy as mediation, the results show that Entrepreneurial Self-efficacy mediate the influence between Entrepreneurship Education and Entrepreneurial Intention. In conclusion, all variables in this study are has significant impact toward each other and the data shown that all hypotheses are proven. We expect this study to help high school teachers in the Probolinggo city to develop students' entrepreneurial intentions. Future researchers are expected to be able to use different mediating variables and expand the research by calculating the amount produced by each variable that affects each other.

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Biography

Mediany Kriseka Putri, S.K.G., M.A.B is a lecturer and also a research team at the Faculty of Economics and Business, Telkom University (Indonesia). She holds Bachelor of Dentistry degree from Padjajaran University, Indonesia and Master of Business Administration from School of Business and Management-ITB. Mediany's research interests focus topic are Ecopreneurship, Womanpreneurship, Medium and Small Business (SME) Management. Her research results have been published in several conference papers as well as in accredited journals.

Audi Elvira Widiyanti is currently studying at Telkom University, Faculty of Economics and Business. Audi is currently taking the ICT Business study program to get her bachelor's degree. Her research interests mainly concern entrepreneurship, entrepreneurship education and entrepreneurial psychology. This journal is the first journal that Audi has created that focuses on the field of entrepreneurship.